

10/586134

IAP11 Rec'd PCT/PTO 17 JUL 2006

**THE FOLLOWING ARE THE ENGLISH TRANSLATION
OF ANNEXES TO THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT (ARTICLE 34):**

Amended Sheets (Pages 12 & 13)

12 IAP11 Rec'd PCT/PTO 17 JUL 2006

We claim:-

1. The use of a thermally polymerizable mixture consisting of a multifunctional macromonomer comprising one or more free-radically polymerizable double bonds and a polymerization initiator as a binder for a fibrous or granular substrate.
2. The use according to claim 1 wherein said thermally polymerizable mixture is used as a binder for glass fiber, rock wool, natural fiber, manufactured fiber and for core sand binding.
3. The use according to claim 1 or 2 wherein said macro-monomers comprise acrylate, methacrylate, maleate, vinyl ether, vinyl and/or allyl groups as free-radically polymerizable groups.
4. The use according to any of claims 1 to 3 wherefor the molar mass M_w of said multifunctional macromonomer is in the range from 300 to 30 000.
5. The use according to any of claims 1 to 4 wherefor the molar mass M_w of said multifunctional macromonomer is in the range from 500 to 20 000.
6. The use according to any of claims 1 to 5 wherefor said multifunctional macromonomer is obtainable by co-reacting.
 - a) 0.5-2.0 equivalents of a 2- to 6-hydric alkoxylated alcohol with
 - b) 0 to 1 equivalent of a 2- to 4-basic C_3 to C_{16} carboxylic acid and/or anhydride and
 - c) 0.1 to 1.5 equivalents of acrylic acid and/or methacrylic acid
 - d) 0 to 1 equivalent of diol
- 30 and then reacting the thus obtainable reaction product with at least one epoxy compound.
7. The use according to claim 6 wherefor said multifunctional macromonomer is obtainable by subsequently reacting the product of the reaction of an epoxy compound with said reaction product with a polyisocyanate in the presence or absence of a chain extender to form a macromonomer comprising acrylate and polyurethane groups.
- 40 8. The use according to any of claims 1 to 7 wherein said polymerization initiator is at least one selected from the group consisting of peroxides, hydroperoxides,

peroxydisulfates, percarbonates, peroxyesters, hydrogen peroxide and azo compounds.

9. The use according to any of claims 1 to 8 comprising 0.05% to 15% by weight
5 solids of a polymerization initiator.